

WS7010AD

Smart High-Side Power Switch Single Channel, 12mΩ, DFN5×6-16L, AEC-Q100 qualified

Application

- Suitable for resistive, inductive and capacitive loads
- Specially intended for automotive signal lamps
- Replaces electromechanical relays, fuses and discrete circuits

Basic Features

- Single channel device
- Standby current <2.0µA
- 3.3 V and 5 V compatible logic inputs
- RoHS compliant and lead free
- AEC-Q100 qualified

Product Summary

Package Information			
Package	DFN5×6-16L		
Marking	WS7010AD		
	BILLIA		

Parameter	Symbol	Value
Max. DC supply voltage	Vcc	35V
Operating voltage range	V _{NOM}	4.5-28V
On-state resistance (per channel, Typ.)	R _{ON}	12mohm
Nominal load current	I _{L(NOM)}	11A
Typical current sense ratio (I _{OUT} =8A)	К	3250
Current limitation (typ.)	I _{LIMH}	48A
Supply current in standby mode	I _{STBY}	<2.0µA

Diagnostic Functions

- Multiplexed analog feedback of load current with high precision proportional current mirror
- Off-state open load detection
- Output short to V_S detection

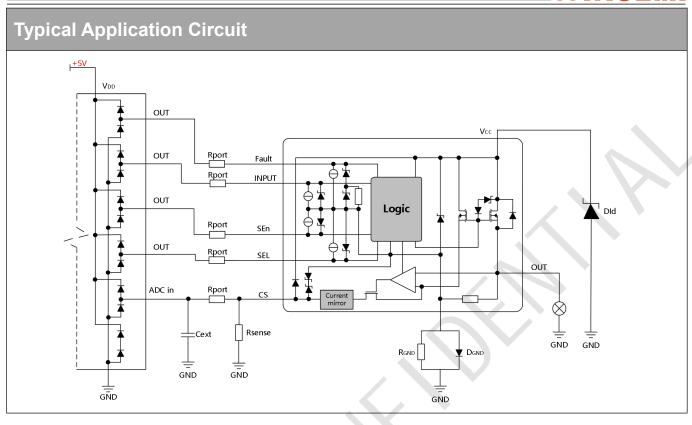
Protection Functions

- Undervoltage shutdown
- Overvoltage clamp
- Load current limitation
- Output short-circuit protection
- Self limiting of fast thermal transients
- Protection against loss of ground and loss of Vs
- Thermal shutdown indication
- Electrostatic discharge protection

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